WHAT IS CLAIMED IS:

1. A circuit comprising:

an input inductor-capacitor (LC) circuit;

a first and a second output inductor-capacitor (LC) circuit;

a first transistor connected to the input LC circuit and the first output LC circuit; and

a second transistor connected to the first transistor and the second output LC circuit;

wherein in differential mode said first and second output LC circuits each form an output impedance matching network for first and second output terminals, respectively, and in common mode said first and second output LC circuits are grounded.

2. The circuit according to Claim 1, wherein the circuit is adapted for connection via an input terminal to one of the group consisting of a single-ended low-noise amplifier (LNA) and a single-ended local oscillator (LO).

3. The circuit according to Claim 1, wherein an emitter of the first transistor and an emitter of the second transistor are coupled via two inductors.

4. The circuit according to Claim 3, wherein an inductor-capacitor (LC) band stop resonator circuit is coupled to a node connecting the two inductors and to a current source.

5. The circuit according to Claim 4, wherein the LC band stop resonator circuit includes a capacitor coupled in parallel to an inductor.

6. The circuit according to Claim 1, wherein each base of the first and second transistors is coupled to a respective resistor.

7. The circuit according to Claim 1, wherein each output LC circuit includes an output capacitor coupled to a respective output terminal of the first and second output terminals.

8. The circuit according to Claim 1, wherein the input LC circuit includes an input capacitor coupled to an input terminal.

9. The circuit according to Claim 1, wherein each collector of the first and second transistors is coupled to a respective inductor and to one of the first and second output LC circuits.

10. The circuit according to Claim 1, wherein a base of the first transistor is coupled to the input LC circuit.

11. A circuit comprising:

means for providing a low-pass frequency response of signals received from a single-ended device; and

means for providing as an output two balanced signals as a function of the low-pass frequency response of the signals received from the single-ended device, said means for providing two balanced signals including a differential pair amplifier means having a balanced

output and a single-ended input coupled to the means for providing the low-pass frequency response.

12. The circuit according to Claim 11, wherein the differential pair amplifier means includes at least one DC blocking capacitor.

13. The circuit according to Claim 11, wherein the differential pair amplifier means includes first and second transistors having their emitters coupled via two inductors forming an emitter-coupled node.

14. The circuit according to Claim 13, wherein the emitter-coupled node is coupled to a first terminal of an inductor-capacitor (LC) band stop resonator having a capacitor connected in parallel to an inductor, a second terminal of the LC band stop resonator is coupled to a current source coupled to ground and a voltage power supply.

15. A method for converting a single-ended signal received by a circuit to a differential radio-frequency (RF) signal, the method comprising the steps of:

operating the circuit at a differential mode to convert the single-ended signal to the differential RF signal and to form an output impedance matching network with first and second output inductor-capacitor (LC) circuits of the circuit; and

operating the circuit at a common mode to ground said first and second output LC circuits.

16. The method according to Claim 15, further comprising the step of coupling an LC band stop resonator circuit to a node in the circuit connecting two inductors with a current source.

17. The method according to Claim 15, wherein the first and second output LC circuits of the circuit are part of a differential amplifier.